23 JULY 1980

(F0U0 6/80)

1 OF 1

JPRS L/9203 23 July 1980

USSR Report

AGRICULTURE

(FOUO 6/80)



NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

For further information on report content call (703) 351-2938 (economic); 3468 (political, sociological, military); 2726 (life sciences); 2725 (physical sciences).

COPYRIGHT LAWS AND REGULATIONS GOVERNING OWNERSHIP OF MATERIALS REPRODUCED HEREIN REQUIRE THAT DISSEMINATION OF THIS PUBLICATION BE RESTRICTED FOR OFFICIAL USE ONLY.

JPRS L/9203 23 July 1980

USSR REPORT AGRICULTURE (FOUO 6/80)

CONTENTS

POST HARVEST C	ROP PROCESSING	
Oil and	Fats Industry in 1979 (B. N. Chubinidze, F. N. Minevich; MASLO-ZHIROVAYA PROMYSHLENNOST', May 80)	1
Summary	of Work of RSFSR Fat and Oil Industry in 1979 (V. A. Onishchenko, et al.; MASLO-ZHIROVAYA PROMYSHLENNOST', May 80)	20
LIVESTOCK FEED	PROCUREMENT	
Establis	chment of Reliable Feed Base for Livestock (A. I. 01'yashev; KORMOPROIZVODSTVO. Jun 80)	21

[III - USSR - 7 FOUO]

POST HARVEST CROP PROCESSING

UDC 665.1(47+57)"1979"

OIL AND FATS INDUSTRY IN 1979

Moscow MASLO-ZHIROVAYA PROMYSHLENNOST' in Russian No 5, May 80 pp 26-35

[Article by Candidate of Technical Sciences B. N. Chubinidze, chief of the USSR Ministry of Food Industry's Uprraszhirmaslo, and F. N. Minevich, chief economist of the Uprraszhirmaslo production-economics department]

[Text] In actualizing the resolutions of the 25th CPSU Congress, food industry workers have widely developed socialist competition to increase production efficiency and improve product quality, and they achieved further increases in foodstuffs production in 1979. Oil and fats branch workers made a considerable contribution to this important effort.

Oil and fats enterprises met plan assignments for marketing finished products as a whole by 100.4 percent, including by 100.2 percent for industry of republic subordination (Table 1).

Table 1.			
	m -	1.1.	- 1
	112	DIP	

	plan, in	fulfi	llment
ministries of food industry	million rubles	in million rubles	in per- cent of plan
USSR	5,062.5	5,084.1	106.4
including industry of republic		•	
subordination	3,438.4	3,444.1	100.2
including union industry	1,642.0	1,640.0	101.0
RSFSR	1,647.0	1,635.5	99.3
Ukrainian SSR	901.7	916.5	101.6
Belorussian SSR	30.3	31.1	102.6
Uzbek SSR	414.3	414.8	100.1
Kazakh SSR	76.3	77.2	101.2
Georgian SSR	18.1	18.2	100.5
Azerbaijan SSR	48.8	47.9	98.2
Lithuanian SSR	14.1	14.8	104.7
Moldavian SSR	81.3	81.3	100.0
Latvian SSR	13.4	13.7	102.3
Kirgiz SSR	14.2	14.4	101.5

٦

(Table 1, continued)

Tadzhik SSR	94.4	93.8	99.3
Armenian SSR	31.91	31.95	100.1
Turkmen SSR	38.9	39.2	100.9
Estonian SSR	13.75	13.78	100.2

It is evident from Table 1 that all the republic ministries except for those of the RSFSR, Azerbaijan and Tadzhikistan coped with the plan assignments for the ministries of food industry.

In spite of fulfillment of the sales plan for the branch as a whole, plans for producing individual types of output (vegetable oil, drying oil, stearin, olein and others) were not met. Their levels of production also decreased as compared with 1978 (Table 2).

T.	h	1.	2	
1a	D	1e		

	plan, in		fulfillme	nt
	1,000 tons	1,000	percent	percent
		tons	of plan	of 1978
vegetable oil from state stocks	2,760.0	2,622.5	95.0	95.0
margarine	1,275.0	1,270.4	99.6	104.0
including industry of republic		•		
subordination	296.0	293.1	99.0	101.1
hydrogenated fat	1,061.0	1,067.5	100.6	102.1
soap converted to 40-percent fatty		•		
acids content	1,452.7	1,395.0	96.0	99.1
including hand soap, in physical		·		
terms	252.9	247.5	98.0	111.0
synthetic detergents	215.0	167.4	78.0	87.0
mayonnaise	104.2	104.0	99.8	101.8
drying oil from state stocks	170.4	111.1	65.2	79.2
stearin	37 • 75	35.75	94.7	94.7
olein	34.75	32.6	94.0	96.7
phosphatide concentrates	11.0	11.4	103.6	100.6
including food types	3.2	1.74	54.4	90.2
feed types	7.8	9.6	123.0	102.0
mustard powder	25.0	24.6	98.0	112.8

In 1979, oil and fats industry as a whele failed to meet the plan for gross output and labor productivity. These important indicators were also worse than in 1978 (Table 3, page following).

Vegetable Oil Production

The failure to meet the vegetable oil production plan is to be explained by the fact that enterprises failed to receive considerable amounts of cotton seed as compared with the plan and by the fact that the ripening and harvesting of sunflower seed were delayed in 1979.

Table 3.	gross outp	ut	-	t per ker	-	rate, in of 1978
ministries of food industry	plan, in mil- lion rubles	percent of plan	plan, rubles	percent of plan	gross output	output per worker
USSR	3,666.2	95.0	67,111	95.5	95.8	96.5
RS F SR	1,814.0	91.2	72,691	92.0	93.0	93.9
Ukraine	915.4	101.7	84,283	101.2	104.1	104.6
Belorussia	30.3	101.0	78,662	102.3	79.0	80.2
Uzbekistan	454.1	92.4	45.911	92.7	95.6	95.8
Kazakhstan	76.55	101.4	56,328	101.8	98.5	98.7
Georgia	17.3	102.4	48,316	102.4	92.1	92.6
Azerbaijan	48.05	100.0	46,560	101.0	99.8	102.4
Lithuania	14.2	102.8	39,765	102.8	91.8	96.2
Moldavia	85.4	95.9	56,762	96.0	81.4	82.5
Latvia	13.5	101.8	58,190	101.8	73.6	74.2
Kirgizia	13.9	105.4	35,254	104.6	95.6	95.6
Tadzhikistan	95.3	99.2	56,071	100.1	99.3	99.3
Armenia	31.9	100.4	61,500	100.1	91.8	93.9
Turkmenistan	42.4	92.2	48,000	95.5	89.8	90.1
Estonia	13.97	100.4	64,977	100.4	100.0	100.0

In September and October, several enterprises operated with down time and had to process soybeans instead of sunflowers. Moreover, the planned export of sunflower seed from Krasnodarskiy Kray to the Central Chernozem Region and the Volga Area, as well as from southern Ukraine to enterprises located in northern regions of the republic, was not ensured in September.

It must also be noted that low-grade cotton seed was received by oil mills of the Uzbek, Turkmen and Tadzhik SSR's, resulting in productivity at a number of mills being reduced by 10-15 percent and oil output dropping.

Given overall nonfulfillment of the vegetable oil production plan, individual ministries of food industry and associations coped with annual assignments and several exceeded the 1978 level (Table 4, page following).

In 1979, the assortment of vegetable oils produced was different than in 1978 (Table 5, page following). For example, the production of mustard oil increased significantly and the production of soy, tung and bone oil also increased. Due to shortages of raw material, the output of sunflower, cottonseed, castor and flax oil dropped sharply.

Along with producing oil from state stocks, republic food industry ministry oil mills also produced 137,400 tons of oil from customer-supplied seed in 1979.

 $\tt Oil$ and fats industry intensified work on protecting and using raw material effectively.

Table 4.				
	plan, in		fulfillment	
ministries of	1,000 tons	1,000	percent	percent
food industry		tons	of plan	of 1978
			-	
USSR	2,760.0	2,622.5	95	95
RSFSR	940.0	865.9	92	94
Ukrainian SSR	837.5	850.0	101	101
Belorussian SSR	16.0	17.2	108	79
Uzbek SSR	473.0	416.7	88	92
Kazakh SSR	84.4	85.1	100.9	99
Georgian SSR	11.3	10.3	91	71
Azerbaijan SSR	46.0	42.0	90	99
Lithuanian SSR	3.6	3.4	95	68
Moldavian SSR	95.7	87.3	91	74
Latvian SSR	19.0	17.4	92	71
Kirgiz SSR	19.4	20.0	103	95
Tadzhik SSR	89.6	88.5	99	94
Armenian SSR	8.2	8.3	102	65
Turkmen SSR	58.7	53.2	91	89
Union industry:	57.0	57.2	100.5	102
Soyuzmargarinprom	30.2	30.7	102	107
Soyuzparfyumerprom	14.3	13.9	97	90
Kerch Experimental				
Oil Mill	7.7	7.8	101	96
Krasnodar Experimental				
Oil Mill	4.8	4.8	100	115
Table 5.				
	plan, in		fulfillment	
oils	1,000 tons	1,000	percent	percent
		tons	of plan	of 1978
total	2,760.0	2,622.5	95	95
	*	=	- -	
sunflower flax	1,712.4	1,659.1	97	96
	10.97	8.6	78	52
cottonseed	710.8	637.4	90	88
castor	15.05	15.1	100.5	94
mustard	21.8	23.8	109	127
corn	12.1	10.7	89	98
soy	262.2	252.6	96	115
peanut		0.17		
tung	0.28	0.29	104	153
bone	0.51	0.92	180	162
other	14.0	13.9	97	59

However, as the results of this past year show, individual enterprises had not prepared warehouses and ventilation-drying equipment for processing the new harvest, did not ensure the smooth acceptance of raw material from kolkhozes and sovkhozes in their zones until warehouses and elevators were full, and permitted large above-plan oil raw material processing losses.

Total oil losses in 1979 are shown for the republic ministries in Table 6. Table 6.

	197	78, in pe	rcent	19	79, in p	ercent
	seed	oil	oil	seed	oil	oil
republics	oil	yield	losses	oil	yield	losses
•	content	•		content	·	
USSR	46.90	45.49	1.20	47.85	46.42	1.19
pressed	44.59	41.81	2.69	45.09	42.29	2.70
extracted	47.34	46.18	0.92	48.30	47.09	0.95
RSFSR	46.26	44.85	1.27	46.97	45.51	1.32
pressed	43.42	40.72	2.66	43.90	41.18	2.68
extracted	47.07	46.02	0.88	47.78		
Ukrainian SSR	47 • 47	45.94	1.12	48.72	47.28	1.07
pressed	46.35	43.51	2.60	46.89	44.04	2.56
extracted	47.59	46.27	0.96	48.88	47 • 36	0.94
Latvian SSR, extracted	45.43	44.50	0.93	46.80	45.92	0.88
Lithuanian SSR, pressed	42.13	38.95	3.18	43.22	39.72	3.50
Georgian SSR, extracted		42.84	0.79	41.91	41.12	0.79
Belorussian SSR, ex-						
tracted	46.15	45.27	0.94	46.86	45.74	1.12
Kazakh SSR, extracted	48.53	47.49	0.67	48.07	46.69	1.02
Moldavian SSR, ex-						
tracted	48.22	47.24	0.98	48.67	47.76	0.91
Soyuzmargarinprom	46.44	45.11	1.03	46.35	45.40	1.25
pressed	47.34	44.62	2.72	47.88	45.24	2.64
extracted	46.30	45.53	0.77	46.03	45.08	0.95
Kerch' Experimental						
Oil Mill	46.91	43.59	3.31	48.78	45.23	3.55
Krasnodar Experimental						
Oil Mill	46.42	43.32	3.10	48.74	45 • 63	3.10

Oil mills of the Ukrainian, Latvian and Moldavian SSR's achieved significant reductions in overall oil losses as against 1978.

However, oil losses in production increased as compared with the plan and with 1978 at enterprises of the Belorussian SSR (plan 0.97 percent, actual 1.12 percent) and RSFSR (plan 1.27 percent, actual 1.32 percent). Oil losses increased significantly at enterprises of the Soyuzmargarinprom.

As before, the Kerch' and Krasnodar experimental oil mills of the 'Maslo-zhirprom" all-union scientific production association are working unsatisfactorily.

At a number of enterprises, sunflower processing losses are excessive (in percent):

	plan	actual
Chernovitskiy MZhK (oil and fats combine)	1.18	1.41
Pologskiy MEZ (oil extraction plant)	0.83	1.02
Orenburg MEZ	1.09	1.90

	plan	actual
Slavyanskiy MZhK	0.79	0.99
Uryupinskiy MEZ	0.76	0.96
Millerovskiy MEZ	0.88	1.01
Svatovskiy MEZ	0.86	0.93
Odessa MZhK	0.90	0.98
Nal'chinskiy Oil Mill	2.75	2.86

Several enterprises reduced oil losses in production (in percent):

	plan	actual
Volchanskiy MEZ	1.12	0.98
Poltava MZhK	1.11	1.05
Kropotkinskiy MEZ	0.82	0.73
Nevinnomysskiy MEZ	0.75	0.72
Atkarskiy MEZ	0.92	0.80

Individual enterprises (the Irkutsk, Ussuriy and Chernovitskiy oil and fats combines, the Pologskiy Oil-Extraction Plant and others) have higher oil and solvent losses in production year after year. The production associations of which these enterprises are a part must obviously analyze their work and develop a complex of measures to assist them.

The Orenburg Oil Extraction Plant is a model in this regard. Thanks to steps taken during major repairs, oil losses in sunflower processing had dropped to 1.11 percent in fourth quarter 1979 as against 1.64 percent in 1978.

Last year, 3,843,000 tons of cotton seed was processed and 637,100 tons of cottonseed oil was produced, including 390,600 tons in the Uzbek SSR, 84,000 tons in the Tadzhik SSR and 53,100 tons in the Turkmen SSR.

Cotton gins of the USSR Ministry of Light Industry sent oil mills 955,000 tons of substandard cottonseed and Grade 4 seed in 1979. Thus, whereas 19.5 percent of the 4,172,700 tons of cottonseed supplied in 1978 was substandard and Grade 4, that figure had risen to 24.9 percent in 1979, given a total of 3,843,700 tons supplied.

Table 7 [page following] gives data on cottonseed oil content and oil yield (in percent).

Cottonseed processing oil losses in 1979 had increased as compared with 1978 and as against the plan (1.59 percent, given a plan of 1.44 percent). All republics processing cottonseed, with the exception of the Tadzhik and Kirgiz SSR's, permitted planned oil losses to be exceeded.

There were high losses at the Yerevan Oil and Fats Combine (1.77 percent, as against a plan of 1.15 percent and 1.45 percent in 1978), the Bayram-Aliyskiy Oil and Fats Combine (2.42 percent, given a plan of 1.1 percent and 1.21 percent in 1978), the Kanibadamskiy Oil Extraction Plant (1.45 percent, given a

plan of 1.1 percent) and at enterprises of the Uzbek SSR (1.54 percent, given a plan of 1.45 percent and 1.44 percent in 1978).

Table 7.						
		1978			1979	
	seed	oil	oil	seed	oil	oil
republics	oil	yield	losses	oil	yield	losses
	content			content		
USSR	18.79	17.32	1.47	18.17	16.58	1.59
pressed	18.48	14.45	4.00	17.71	13.55	4.16
extracted	18.83	17.67	1.16	18.23	16.96	1.27
Uzbek SSR	18.52	17.07	1.44	17.69	16.15	1.54
pressed	17.93	13.97	3.92	16.55	12.43	4.12
extracted	18.59	17.45	1.14	17.83	16.59	1.24
Azerbaijan SSR, extracted	18.43	17.23	1.20	18.50	16.62	1.20
Tadzhik SSR	19.05	17.44	1.61	19.47	17.95	1.52
pressed	18.99	14.64	4.35	19.68	15.50	4.18
extracted	19.06	17.74	1.32	19.46	18.25	1.21
Armenian SSR, extracted	18.65	17.20	1.45	17.73	15.93	1.77
Kirgiz SSR, extracted	19.20	18.16	1.04	19.02	18.09	0.93
Kazakh SSR, extracted	19.33	18.36	0.97	18.50	17.51	0.99
Turkmen SSR	20.14	17.88	2.26	19.69	16.59	3.09
pressed	19.49	15.45	4.04	19.12	15.01	4.10
extracted	20.52	19.31	1.21	20.07	17.65	2.42

The Yerevan Oil and Fats Combine permitted a high gasoline expenditure per ton of cottonseed extracted -- 16 kg. Enterprises of the Uzbek SSR (10.7 kg) and Tadzhik SSR (10.13 kg) spent more than 10 kg of gasoline per ton of seed and enterprises of the Turkmen SSR spent more than 9 kg per ton. Given a norm of 8.9 kg, the Denauskiy Oil Extraction Plant spent 21.9 kg of gasoline per ton, the Karshinskiy plant -- 15.6 kg, and the Bukhara plant -- 13.8 kg/ton.

Gasoline expenditure was considerably lower at the Chimkent Oil and Fats Combine -- 6.26 kg/ton.

The following permitted significant gasoline overexpenditures in sunflower processing: Ochamchirskiy Oil Extraction Plant -- 24 kg, given a norm of 10 kg; Orenburg -- 16, as against 7.5; Bogatovskiy -- 16, as against 9.5; Slavyanskiy Oil and Fats Combine -- 14, as against 6.5; Chernovitskiy -- 24, as against 10. The following permitted overexpenditures on soybean processing" Ust'-Labinskiy Oil Extraction Plant -- 23.2, as against 15; Krasnodar Oil and Fats Combine -- 19, as against 15; Biyskiy Oil Extraction Plant -- 35, as against 15; Irkutsk Oil and Fats Combine -- 34, as against 15 kg.

In 1978, we processed 1,486,200 tons of soybean seed to produce toasted oil cakes for mixed-feed industry (Table 8, in 1,000 tons, page following).

Table 8.			
ministries of food industry	soybean seed processed	oil produced	oil cake produced
USSR	1,486.2	252.6	1,151.5
RSFSR	851.4	138.7	652.2
Ukrainian SSR	206.8	38.1	156.8
Belorussian SSR	26.5	4.99	19.6
Uzbek SSR	152.9	25.5	115.8
Kazakh SSR	53.6	9.6	40.3
Moldavian SSR	73.2	13.7	55.9
Latvian SSR	14.5	2.66	11.0
Kirgiz SSR	12.2	2.2	9.1
Georgian SSR	5.0	0.8	3.6
Armenian SSR	14.5	2.4	10.7
Tadzhik SSR	22.3	4.1	17.2
Soyuzmargarinprom	1.9	0.28	1.35
Soyuzparfyumerprom	51.4	9.6	57.0

Table 9 gives comparative data for 1978 and 1979 on soybean oil content, oil yield and extraction and pressing processing losses (in percent).

Table 9.						
	oil	19:	78	oil	19	79
ministries of	content	yield	losses	content	yield	losses
food industry		•			•	
USSR	18.80	16.92	1.65	18.81	16.97	1.58
pressed	18.74	13.86	4.81	18.55	13.69	4.79
extracted	18.81	17.37	1.18	18.84	17.38	1.18
RSFSR	18.60	16.61	1.80	18.52	16.25	1.89
pressed	18.63	13.71	4.86	18.46	13.57	4.84
extracted	18.67	17.71	1.21	18.53	16.83	1.26
Ukrainian SSR	19.43	17.80	1.24	19.64	18.42	0.88
pressed	19.08	14.54	4.46	19.63	14.98	4.30
extracted	19.46	18.11	0.93	19.64	18.64	0.67
Belorussian SSR,						
extracted	19.39	18.44	0.95	19.55	18.81	0.74
Uzbek SSR, extracted	18.43	16.76	1.67	18.44	16.67	1.77
Georgian SSR,						
extracted	14.78	13.96	0.82	17.29	16.47	0.82
Latvian SSR	18.80	18.29	0.51	19.02	18.32	0.70
Moldavian SSR	19.50	18.80	0.70	19.46	18.71	0.75
Kazakh SSR	18.30	18.82	1.48	19.15	17.81	1.32
Kirgiz SSR	18 .66	17.97	0.68	18.52	17.89	0.63
Soyuzmarganimprom,						
pressed	20.13	15.70	4.43	18.70	14.75	3.95
Soyuzparfyumerprom,						
extracted	19.19	17.98	1.21	19.53	18.64	0.89
Tadzhik SSR, extracted				19.92	18.36	1.56
Armenian SSR, extracted				18.63	16.79	1.83

8

A number of oil and fats enterprises have achieved low oil production losses for soybean processing. They include the Karasuyskiy Oil Extraction Plant -- 0.63 percent, the Vitebsk Oil Mill -- 0.74 percent (given a plan of 0.83 percent), the Liyepayskiy Oil Extraction Plant -- 0.7 percent (given a plan of 0.86 percent), extraction plants of the Ukrainian SSR -- 0.67 percent (given a plan of 0.87 percent), the Dnepropetrovsk Oil and Fats Combine -- 0.71 percent (given a plan of 0.93 percent), the Vinnitskiy Oil and Fats Combine -- 0.5 percent (given a plan of 0.6 percent), the Poltava Oil and Fats Combine -- 0.7 percent (given a plan of 0.93 percent), the Pologskiy Oil Extraction Plant -- 0.68 percent (given a plan of 0.93 percent) and enterprises of the Moldraszhirmasloprom -- 0.75 percent.

Along with the good indicators achieved by several republic ministries and by individual enterprises, high oil losses obtained at oil extraction plants of the Uzbek SSR (1.77 percent), where 1979 losses were higher than 1978 soybean processing losses.

Enterprises of the Kazakh, Tadzhik and Armenian SSR's also had high oil losses (1,32, 1.56 and 1.83 percent, respectively).

Sunflower and cottonseed processing in the individual republics and proportionate extraction can be judged from Table 10 [page following].

It is evident from these data that in 1979 the proportion of oil seed processed by extraction had increased by 1.3 percent as against 1978, including a two-percent increase in sunflower seed processing. The proportion extracted in sunflower processing at oil and fats enterprises of the Ukrainian SSR increased by 3.7 percent and the proportion extracted in cottonseed processing at enterprises of the Uzbek SSR increased by 0.5 percent.

increasing the proportion done by extraction is a great reserve for increasing vegetable oil production. Now, when extraction plant capacities have increased significantly and continue to be enlarged, it is necessary to resolve the question of the final changeover of pressing plants to extraction or specializing them to produce other oil and fats output.

Change in the oil content of sunflower and cotton seeds and in the proportion of extraction changed specific seed expenditure norms last year (see Table 11, page following).

It is evident from Table 11 that sunflower seed expenditure to produce one ton of oil decreased, on the whole, for the USSR Ministry of Food Industry and for corresponding ministries in the RSFSR, Ukraine, Belorussia and Latvia. Along with this, cottonseed expenditures per ton of oil increased significantly due to a reduction in cottonseed oil content and oil yields, with the exception of the Tadzhik SSR Ministry of Food Industry.

Packaged oil production plan fulfillment is shown in Table 12 [second page following].

Table 10.	19	7.8	10	70
	total seed	-		79
ministries of	processed,	proportion		proportion
food industry	1,000 tons	extracted,	processed,	extracted,
and and day	r,000 cons	in percent	1,000 cons	in percent
USSR (all oils)	9,605.0	86.6	9,061.6	87.9
Sunflower Seed			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
USSR	3,868.0	84.1	3,627.8	86.1
RSFSR	1,627.0	78.0	1,523.3	79.4
Ukrainian SSR	1,753.7	88.2	1,725.3	91.9
Belorussian SSR	35.0	100.0	24.0	100.0
Kazakh SSR	55.5	100.0	65.1	100.0
Georgian SSR	32.8	100.0	22.2	100.0
Lithuanian SSR	10.3		8.1	
Latvian SSR	37.4	100.0	15.8	100.0
Moldavian SSR	226.7	100.0	148.0	100.0
Soyuzmargarinprom	60.5	86.6	67.4	82.3
Krasnodar Experimental			0,04	02.13
Oil Mill	97.0		10.7	
Kerch' Experimental				
Oil Mill	19.0		18.0	
Cotton Seed				
USSR	4,172.7	89.0	3,843.0	88.88
Uzbek SSR	2,558.0	89.0	2,417.8	89.5
Azerbaijan SSR	247.2	100.0	252.8	100.0
Tadzhik SSR	539.8	90.3	467.8	89.3
Armenian SSR	73.9	100.0	37.0	100.0
Turkmen SSR	335.1	62.8	320.5	59.8
Kazaki SSR	301.1	100.0	249.2	100.0
Kirgiz SSR	117.8	100.0	98.5	100.0
Table 11.		brooms bees	iture per ton	
ministries of food indu	strv		duced, in kg	
	,	1978	1979	
Sunflower Seed		2770	19/9	
USSR		2,198	2,172	
RSFSR		2,230	2,200	
Ukrainian SSR		2,180	2,120	
Belorussian SSR		2,215	2,186	
Moldavian SSR		2,117	2,094	
Kazakh SSR		2,102	2,143	
Latvian SSR		2,253	2,174	
Georgian SSR		2,343	2,432	
Lithuanian SSR		2,501	2,517	
Soyuzmargarinprom		2,200	2,217	

[continued on following page]

FOR OFFICIAL USE ONLY

	seed expenditu	re per ton
	of oil produc	ed, in kg
	1978	1979
Cotton Seed	5,773	6,371
Uzbek SSR	5,857	6,190
Azerbaijan SSR	5,802	6,024
Tadzhik SSR	5,730	5,569
Armenian SSR	5,819	6,271
Turkmen SSR	5,594	6,036
Kirgiz SSR	5,519	5,534
Kazakh SSR	5,444	5,703

Table 12.

	plan, in	ft	ılfillmen	t
ministries of food industry	1,000 tons	1,000 tons	percent of plan	•
USSR	160.0	138.5	87.0	98.0
including industry of republic				
subordination	122.6	108.0	88.0	96.0
RSFSR	49.0	41.8	85.0	91.0
Ukrainian SSR	20.0	16.70	83.0	103.0
Belorussian SSR	9.7	9.75	100.6	107.0
Uzbek SSR	14.0	11.90	85.0	96.0
Kazakh SSR	2.9	2.94	101.0	99.5
Azerbaijan SSR	2.5	1.85	74.0	103.0
Lithuanian SSR	3.4	3.4	100.0	108.0
Moldavian SSR	7.3	6.2	84.0	85.0
Latvian SSR	3.2	3.05	95.3	99.8
Kirgiz SSR	2.1	2.14	102.0	99.5
Tadzhik SSR	3.5	3.53	100.9	107.0
Armenian SSR	2.5	2.35	94.0	105.0
Turkmen SSR	2.5	2.52	100.5	99.7
Soyuzmargarinprom	36.1	29.05	80.5	105.0
Krasnodar Experimental				
Oil Mill	1.3	1.35	103.8	102.0

Food and feed phosphatide production at enterprises of the republic ministries of food industry can be judged from the data in Table 13 (page following).

It must be noted that increasing attention has been paid recently to phosphatide production. Industry continued to receive modern equipment for hydrating oil. The production plan for this important product has also grown correspondingly.

In 1979, enterprises failed to provide 7,448 tons of oil due to above-normative losses, including 2,017 tons of sunflower oil and 6,146 tons of cotton-seed oil, but we saved 715 tons of soybean oil due to below-plan losses.

Table 13.				
	plan,	f	lfillment	
ministries of food industry	tons	tons	percent	percent
			of plan	of 1978
Phosphatides	10,990	11,376	103.5	100.6
RSFSR	4,600	5,361	116.5	91.0
Ukrainian SSR	5,330	4,463	83.7	119.9
Moldavian SSR	900	1,203	133.7	93.3
Kazakh SSR	140	240	171.4	99.1
Latvian SSR	20	40	200	
Kerch' Experimental				
Oil Mill		69		60.5
Food Phosphatides	3,230	1,739	53.8	90.3
RSFSR	1,260	876	69.5	73.3
Ukrainian SSR	1,830	732	40.0	127.3
Moldavian SSR	140	126	90.0	80.8
Latvian SSR		. 5		11.6
Feed Phosphatides	7,760	9,637	124.2	96.6
RSFSR	3,340	4,485	134.3	95.6
Ukrainian SSR	3,500	3,731	106.6	118.6
Moldavian SSR	760	1,077	141.7	94.97
Kazakh SSR	140	240	171.4	99.1
Latvian SSR	20	35	175.0	
Kerch' Experimental				
Oil Mill		69		60.5

Significant above-normative oil and gasoline losses were permitted in sunflower processing at RSFSR and Ukrainian SSR enterprises (Table 14, page following).

Detergent Production

Some 1,396,000 tons of soap was produced in 1979 (converted to 40-percent fatty acids content), given a plan of 1,452,700 tons. Neither was the plan met for producing hand soap in physical terms: given a plan of 252,900 tons, 247,500 tons was produced, 111 percent of 1978 (Table 15, second page following).

In connection with nonfulfillment of the soap production plan, the overall expenditure of soap stock in soap manufacture was somewhat below the plan and even below the 1978 level. However, soap stock expenditure per ton of soap increased to 142.6 kg, as against 136.3 kg in 1978.

Data on left-over soap stock and soap stock expenditure are given for individual republics in Table 16 (third page following).

Synthetic detergent production for the country as a whole and for the USSR Ministry of Food Industry in particular was retarded due to unsatisfactory provision of enterprises with chemical raw material, packing and packaging materials (Table 17, fourth page following).

able 14.	. 4.		1978						1979				
	J	oil losses		gasoli	gasoline expenditure	liture	Ū	oil losses			gasoline expenditure	diture	
	planned,	actual,	+/-,	plan,	actual,	' -/+	planned,	actual,	+/-,		actual, +/-,	+/-,	
	percent	percent	tons	in kg	in kg	tons	percent	percent	tons	in kg	in kg	tons	
(1)	1.17	1.20	-1,429	;	ł	;	1.13	1.19	-2,017	1	;	;	
5)	0.88	0.92	-1,121	5.97	8.33	-7.667	0.88	0.95	-1,980	7.3	8.67	-4.180	
<u>(</u>	1.24	1.27	- 607	;	1	; ; ;	1.27	1.32	- 827	,			
(4)	0.84	0.88	- 544	0.9	9.1	-3,905	0.0	96.0	- 777	•	9.5	-2,137	
2)	0.95	0.94	+	7.0	7.83	- 29	0.97	1.12	- 36	7.64		. 1	
(9)	1.12	1.17	- 717	;	;	;	1.03	1.07	- 802	1	;	ŧ	
2	0.93	96.0	- 459	0.9	7.96	-3,001	0.89	0.94	- 804	7.23	8.14	-1,436	
(8)	0.73	0.67	+ 33	5.9	7.3	- 78	0.76	1.02	- 168	7.67	9.19	- 99	
6	0.00	0.98	- 167	5.8	6.9	- 249	0.83	0.91	- 110	19.9	7.8	- 161	•
(01	0.97	0.93	+ 15	5.0	4.0	+ 37	96.0	0.88	+	9.9	9.5	+ 41	. 01
(11)	0.79	0.79	•	0.6	22.2	- 433	0.79	0.79	;	0.6	24.5	- 344	
12)	1.04	1.03	9 +	: !	!	;	1.17	1.25	- 54	2.6	3.34	- 41	01.1
13)	0.79	0.77	+ 10	7.6	2.77	6	0.87	0,95	- 44	;	;	;	. 1.
14)	3.23	3.10	+ 12	;	;	;	3.19	3.11	+	;	;	:	,,,,
15)	3.37	3.31	+ 11	!	;	:	3.57	3.55	+	:	1	;	ш
ey:													UDE
	USSR					ldavian	Moldavian SSR, extraction	action					OI
2.	includi	including extraction	tion		10. L	tvian S	Latvian SSR, extraction	tion					111
m	RSFSR				_	sorgian	Georgian SSR, extraction	ction					
4.	includi	including extraction	tion			Soyuzmargarinprom	arinprom						
'n	Belorussi	Belorussian SSR, extraction	xtractio	g		includi	including extraction	ion					
ė	Ukrainian SSR	1 SSR				rasnodar	Krasnodar Experimental Oil Mill	tal 011 N	1111				
7.	includi	including extraction	tion			erch' Ex	Kerch' Experimental Oil Mill	011 M111					
<u>φ</u>	Kazakh St	Kazakh SSR, extraction	tion										

	percent of 1978	111 109	125 97	115	106	118	:	103	•	105.6	ł	99.5	111	116								
al terms	percent of plan	98 97	105 83	100	105	108	!	101	:	95.8	;	100.7	94.0	100.6								
hand soap, in physical terms	actual, in 1,000 tons	247.5 116.96	25.5	7.6	. 9	3.1	!	2.73	:	5.65	;	1.71	16.9	49.0							Inprom	nerprom
hand soa	plan, in 1,000 tons	252.9 120.85	24.3	7.6	. 9	2.9	!	2.7	;	5.9	ŧ ;	1.7	18.0	48.75		Moldavian SSR	Latvian SSK Fedgiti SSP	Armenian SSR	Turkmen SSR	Estonian SSR	Soyuzmargarinprom	Soyuzparfyumerprom
נו	percent of 1978	99.2	107.0	102.0	104.0 105.0	107.0	101.0	104.0	83.0	99.3	100.9	93.0	0.66	114.0	•		•	12. A		•	15.	16.
40-percen tent	percent of plan	96.0 92.0	100.9 92.0	100.9	101.0 112.0	105.0	103.0	100.9	92.0	8.76	100.0	101.0	100.7	9.66								
soap, converted to 40-percent fatty acids content	actual, in percent 1,000 tons of plan	1,395.0	221.9 145.5	52.4	19.3 52.5	22.0	16.4	17.65	12.4	27.0	12.7	7.8	83.5	96.1	od industry)						æ	88
	plan, in 1,000 tons	1,452.7 661.5	220.0 157.8	52.0	19.0 47.0	21.0	16.0	17.5	13.5	27.6	12.7	7.7	82.9	96.5	Key: (ministries of food industry):	USSK	Marainian SSR	Uzbek SSR	Kazakh SSR	Georgian SSR	Azerbaijan SSR	Lithuanian SSR
table 1).		(55)	£	(G)	<u>3</u> @	<u>@</u> ;	6	(10)	(11)	(12)	(13)	(14)	(15)	(16)	Key: (min	٠,٠	ง ค	4	.5	•	7.	.

	(11)	104.6	107.9	98.0	104.3	104.9	108.3	104.3	202.3	89.5	56.8	;	85.5	77.9	125.6	127.1	103.6																
	(10)	142.6	130.7	106.6	219.8	203.9	84.1	191.1	86.1	125.0	45.9	ŀ	170.8	103.8	214.0	57.2	160.3																mo mo
	6)	156.3	135.0	115.5	236.0	264.9	105.3	178.1	65.8	137.6	72.4	;	281.5	132.9	236.2	46.2	207.4			SOK	-4	84	SSR	n SSR	n SSR	SSR	SR	R	SR	SSR	SR	SSR	Soyuzmargarinprom
	(8)	-17.2	-16.7	6.0 -	- 3.7	- 2.2	- 0.4	+ 1.5	+ 0.4	- 0.17	- 0.33	;	- 1.7	- 0.99	- 0.3	90.0 -	- 1.7		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	UKraınıan	Uzbek SSR	Kazakh SSR	Georgian SSR	Azerbailan SSR	Lithuanian SSR	Moldavian SSR	Latvian SSR	Kirgiz SSR	Tadzhik SSR	Armenian SSR	Turkmen SSR	Estonian SSR	Soyuzma
	3	132.8	50.8	18.6	27.3	7.8	1.6	7.6	1.4	2.03	0.57	;	2.1	1.76	2.7	0.26	8.3				_									•		26. E	
	(9)	150.0	67.5	19.5	31.0	10.0	2.0	6.1	1.0	2.2	6.0	;	3.8	2.75	3.0	0.2	10.0													1978			
	(5)	;	44.0	9.0-	-1.5	-1.0	-0.1	+1.0	-0.4	1 0.1	;	;	-0.5	-0-1	-1.0	+0.1	;		70		80			Lons			tons	in kg	actual, in kg	in percent of			
	(4)	138.0	55.8	18.6	26.5	7.7	1.5	7.1	9.0	2.3	0.9	;	3.1	2.4	2.5	0.3	0.6		1 Ton	יי די	of 1 Jan	r 4	suc	1,000		suc	1,000	1, plan,	n, actua	, in per			
	(3)	138.0	51.8	19.2	28.0	8.7	1.6	6.1	1.0	2.2	6.0	;	3.6	2.5	3.2	0.2	0.6		Affover soon stock so of	08 43.	Lettover soap stock as of	1978 plan, in 1,000 tons	actual, in 1,000 tons	, +/-, ir	plan, in 1,000 tons	actual, in 1,000 tons	difference, +/-, in 1,000 tons	expenditure per ton, plan, in kg	per ton,	per			
	(2)	25.88								!					0.93	;	•		ta caca	י פיל פטיפי	soap st	m, in 1,	ual, in	ference,	m, in 1,	ual, in	ference,	enditure	expenditure	expenditure			
•	(1)	29.96	7.60	2.78	09.9	0.53	;	0.147	90.0	0.27	;	0.33	5.58	0.198	1.03	i	4.85		Lafrover		Lettover	1978 pla	1978 act	1978 dif	1979 pla	1979 act	1979 dif	Fats exp	Fats exp		USSR	RSFSR	
Table 16		(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(54)	(25)	(36)	(27)	į			7.	Ж	4.	ς.	•	7.	<u>«</u>	6	10.	11:	12.	13.	

15 FOR OFFICIAL USE ONLY

Table 17.				
ministries	plan, in 1,000 tons	f: 1,000	ulfillment	
	1,000 cons	tons	percent of plan	percent of 1978
country as a whole USSR Ministry of Oil Refin- ing and Petrochemical In-	984.1	859.9	87.0	98.0
dustry	213.0	196.3	92.0	95.0
Ministry of Chemical Industry	498.5	434.3	87.0	104.0
Ministry of Local Industry	41.6	43.8	107.0	102.0
other organizations USSR Ministry of Light In-	13.7	16.9	123.3	102.7
<pre>dustry including:</pre>	215.0	167.4	78.0	87.0
RSFSR	165.0	131.9	79.9	89.4
Kazakh SSR	25.0	18.0	72.0	90.5
Lithuanian SSR	1.1	1.0	92.0	92.0
Soyuzmargarinprom	23.9	16.5	69.0	71.4

The speech by Comrade L. I. Brezhnev, General Secretary of the CPSU Central Committee and Chairman of the USSR Supreme Soviet Presidium, at the November (1979) CPSU Central Committee Plenum pointed out that people are complaining to the CPSU Central Committee and in letters to editors about interruptions in trade in such goods, which are for some reason assumed to be "petty" items: soap, detergents, and so on.

These interruptions have arisen primarily as a result of the reduction in recent years in the rate of growth in production of detergents due to shortages of raw material (sulfonol, alkyl sulfate, sodium tripolyphosphate, sodium perborate) supplied by chemical industry. In this connection, capacities for producing detergents have not been fully used, and in 1979 the industry failed to provide more than 125,000 tons of detergents, including 48,000 tons to the USSR Ministry of Food Industry. Moreover, as was already pointed out, the soap production plan converted to 40-percent fatty acids content was underfulfilled by 57,000 tons. Although 25,000 tons more hand soap was produced than in 1978, it turned out to be insufficient.

Jointly with republic oil and fats industry associations, the Uprraszhirmaslo reported to the USSR Ministry of Food Industry on steps to increase soap and detergent production in 1980. The ministry collegium has reviewed and approved a number of specific measures facilitating increasing the production and marketing of household and hand soap and detergents. The 1980 plan anticipates the production of 662,000 tons of household soap (in physical terms), which is 86,300 tons more than in 1979; it anticipates the production of 315,000 tons of hand soap, 67,500 tons more than in 1979, and the production of 180,000 tons of detergents, 12,600 tons more than in 1979.

A complex of measures aimed at ensuring fulfillment of the 1980 assignments will be carried out at oil and fats enterprises and in union republic

organizations. In particular, we plan to set up new lines capable of producing four tons of hand soap per hour at a number of combines and to expand capacities at existing shops for lipolysis, processing soap stock, cooking soap, and so on.

Socialist competition for using reserves for meeting plan assignments and improving the quality of household and hand soap and detergents has been widely developed at the enterprises.

Work continued on increasing capacities, raising technical levels, introducing leading technology, and mechanizing and automating production processes.

In 1979, capacities for processing oil seed were increased by 1,420 tons per day, including 1,070 tons per day thanks to new construction and renovation of existing enterprises and 350 tons per day as a result of the introduction of organizational-technical measures.

The Chardzhou Oil Extraction Plant, with a capacity of 800 tons per day, went into operation in the Turkmen SSR. The Ust'-Kamenogorsk Oil Extraction Plant was renovated and its capacity increased by 170 tons per day in the Kazakh SSR.

The plan for increasing capacities was not met in the RSFSR (Krasnodar Oil and Fats Combine -- 50 tons per day, Labinskiy Oil Extraction Plant -- 50 tons per day), the Ukrainian SSR (Kirovograd Oil and Fats Combine -- 80 tons per day) and the Uzbek SSR (Gulistanskiy Oil Extraction Plant -- 1,200 tons per day).

In recent years, capital investments in developing oil and fats industry have increased: 1976 -- 42.6 million rubles, 1977 -- 55.4 million, 1978 -- 52.0 million, 1979 -- 77.3 million and 1980 -- 62.0 million rubles.

However, the level of capital investment utilization by oil and fats enterprises continues to be low (Table 18, page following).

The plan for building oil extraction plants was carried out unsatisfactorily in Gulistan (88 percent), resulting in the plant's not being put into operation, in Kasan (94 percent) and Uchkurgan (44 percent), and a seed warehouse was not put into operation at the Kattakurganskiy Oil and Fats Combine (85 percent). A refining shop was not put into operation at the Gor'kiy combine (45 percent), expansion (21 percent) and construction of an elevator (87 percent) was not finished at the Millerovskiy plant, and elevator construction was not finished at the Biyskiy plant (75 percent). The situation is similar at the Anninskiy plant (23 percent), the Bel'tskiy combine (87 percent) and the Chernovitskiy combine (43 percent), where equipment was not installed due to incompleteness of the construction portion of the main structure.

Table 18. (numerator -- total capital investment; denominator -- investment in construction and installation)

republic	plan, in	fulfillment	
	1,000 rubles	in 1,000 rubles	percent
USSR	77,282	69,913	<u>90</u>
	33,913	30,542	90
RSFSR	20,728	18,628	<u>90</u>
	6,206	5,341	86
Ukrainian SSR	9,670	7,754	<u>80</u>
	3,470	2,463	71
Uzbek SSR	29,272	26,731	<u>91</u>
	15,368	14,557	95
Turkmen SSR	6,910 4,430	$\frac{8,175}{5,322}$	$\frac{118}{120}$
Moldavian SSR	2,014	1,218	<u>60</u>
	600	557	93
Azerbaijan SSR	878	1,074	122
	115	350	304
Kazakh SSR	1,441	1,201	<u>83</u>
	470	414	88
Belorussian SSR	<u>200</u> 	. 200	<u>100</u>
Lithuanian SSR	1,255	862	<u>69</u>
	890	459	52
Tadzhik SSR	620	620	100
	130	130	100
Armenian SSR	<u>400</u>	<u>400</u>	100
	300	300	100

In 1980, oil and fats industry must carry out a number of measures aimed at further raising the technical level of production:

increase oil-extraction plant capacities by 3,130 tons per day, including the start-up of oil-extraction plants in Gulistan and Kasan with capacities of 1,200 tons per day each;

put additional hand soap production capacities into operation at the Gor'kiy and Novosibirsk combines;

FOR OFFICIAL USE ONLY

put a refining facility capable of processing $800\ \mathrm{tons}$ per day into operation at the Gor'kiy combine.

COPYRIGHT: Izdatel'stvo "Pishchevaya Promyshlennost", "Maslo-zhirovaya Promyshlennost", 1980

11052 CSO: 1824

POST HARVEST CROP PROCESSING

SUMMARY OF WORK OF RSFSR FAT AND OIL INDUSTRY IN 1979

Moscow MASLO-ZHIROVAYA PROMYSHLENNOST' No 5 May 80 pp 35-41

[Article by Chief of the Roszhirmasloprom of the RSFSR Ministry of the Food Industry V. A. Onishchenko, Deputy Chief of Roszhirmasloprom Yu. A. Gulezov, Deputy Chief of Roszhirmasloprom F. I. Maznyak and senior engineer of Roszhirmasloprom M. M. Bukhman: "Results of the Work of Roszhirmasloprom Plants for 1979"]

[Text] The workers of our country have begun 1980 enthusiastic about the decisions of the November (1979) CPSU Central Committee Plenum, the sessions of the USSR and RSFSR Supreme Soviets and about the speech of the General Secretary of the CPSU Central Committee, Chairman of the Presidium of the USSR Supreme Soviet Comrade L. I. Brezhnev.

L. I. Brezhnev's speech contains a comprehensive analysis of our economy and the results of the four years of the five-year plan, the tasks for the plan's final year and for the future. In it are revealed shortcomings and ways to eliminate them.

The oil and fat industry's workers in 1979 implemented the tasks facing the industry to increase production efficiency and improve product quality.

As is known, weather conditions last year were not favorable for production of oil-bearing crops. As a result the fat-producing plants operated at less than full capacity. In 1979 more than 2.5 million tons of oil-bearing crops, including 1.5 million tons of sunflower seeds and 860,000 tons of soy beans were processed. A total of 861,000 tons of vegetable oil were produced from state-controlled crops.

Considering the limited resources of oil-bearing seeds, the main attention in 1979 was devoted to technico-economic indicators.

As a result of stringent observance of production cycles, regular equipment maintenance and speedy elimination of identified defects a redution of overall oil losses compared with the approved norms has been achieved at a number of plants (cf. table).

20

Plants	Total Oil Losses in %	
	Norm	Actual
Sunflower Seeds		
Kropotkin Oil Extraction Plant	0.82	0.78
Labinsk Oil Extraction Plant	0.85	0.84
Severskiy Oil Plant	2.62	2.60
Nevinnomyssk Oil-Extraction Plant	0.75	0.71
Novokhopersk Oil Plant	2.65	2.61
Atkarsk Oil-Extraction Plant	0.90	0.80
Rostov Oil and Fat Combine	0.82	0.78
Soy Bean Seeds		
Blagoveshchensk Oil Plant	6.50	5.86
Roslavl' Fat Combine	4.58	4.43
Armavir Oil and Fat Combine	1.20	0.80
Kropotkin Oil-Extraction Plant	1.20	1.07
Labinsk Oil-Extraction Plant	1.18	1.04
Belorechensk Oil-Extraction Plant	1.20	1.14
Nevinnomyssk Oil-Extraction Plant	1.20	0.68
Valuykin Oil-Extraction Plant	1.20	1.03

However, this notwithstanding, the Orenburg and Uryupinsk Oil-Extraction Plants performed unsatisfactorily in oil production from sunflower seeds. The Irkutsk and Khabarovsk Oil and Fat Combines, the Biysk Oil-Extraction Plant and some others, which allowed excessive losses of oil and solvent in the production cycle, performed unsatisfactorily in oil production from soy beans.

This year plans have been made to transfer the experience of leading plants to those lagging behind and to implement a number of organizational and technical measures, which will insure seed processing with better technico-economic indicators.

Plans have been made to process this year the remainder of the seeds of the 1979 crop, primarily at the oil-extraction plants.

Approximately 1.25 million tons of meal and oil cake, most of which was dispatched to plants manufacturing mixed feeds, was produced. Of this amount 630,000 tons of soy bean meal was subjected to heat and moisture treatment (toasting) which increased its feed characteristics. During the year 4,370 tons of phosphatide concentrate used to manufacture a whole milk substitute for feeding calves, was produced (the plan figure was 3,340 tons). It is known that using this substitute is quite beneficial compared with natural milk.

Oil plants in the past year have produced 7,900 tons of soy meal for feed (the plan figure was 6,600 tons).

In 1980 the planned output of phosphatide feed concentrates will increase to 5,800 tons, i.e. 32.7 percent compared with 1979, and soy meal output will increase to 9,000 tons.

At least 150 tons of oil is scheduled to be saved in 1980 through reductions in over-all oil production losses.

175,500 tons of margarine were produced last year. All magarine-producing organizations, except the Irkutsk Oil and Fat Combine, fulfilled the output plan.

The unsatisfactory work of the Irkutsk Combine can be explained mainly by process steam which was supposed to have been supplied. In the first six months of the current year a steam line from the Novo-Irkutsk thermal electric station to the combine will be placed in operation.

This year's plan calls for an output of 197,000 tons of margarine, i.e. 23,000 tons more compared with 1979. In order to fulfil such a difficult plan the uninterrupted operation of the plants throughout the entire year must be insured, and they must be supplied with raw materials and packaging.

Approximately 16,000 tons of low-fat margarine ("Gorodskoy" and "Raduga") was produced last year. This year's plan calls for an increase in margarine production to 95,500 tons, including 38,000 tons of a new margarine-

Approximately 4,000 tons of liquid margarine (the plan figure was 7,450 tons) was produced for the baking and pastry industries. Output was retarded by the slow process of equipping receiving points at the consumer plants.

10,000 tons of special fat was produced for pastry products. This year's plan calls for 8,500 tons of liquid margarine to be shipped in bulk and 10,300 tons of fat for pastry products; including chocolate items.

In 1979 the plants produced 607,600 tons of soap (on a 40 percent basis) with the plan figure fulfilled only 91.8 percent. The main reasons for this were the interruptions in the supply of raw materials and packaging to the plants and the short-fall in the supply of synthetic fatty acids and industrial fats.

In this connection a number of measures to insure maximal utilization of soap boiling of soap stock and other fat wastes in soap production has been implemented.

22

In 1979 the best results in the use of soap stock and fat wastes were achieved by the Omsk Synthetic Detergent Plant--186.7 kg per 1 ton of 40 percent soap, the Gor'kiy Oil and Fat Combine--173.2, the Kazan' Chemical Combine imeni Vakhitov--164.9, and the Kuybyshev Perfume Combine--162.9 kg.

The Kazan', Kuybyshev and Gor'kiy Combines mobilized the worker collectives for the fulfillment of socialist committments and implemented additional measures for utilizing raw material stocks and as a result overfulfilled the soap production plan.

On the other hand, the Irkutsk Oil and Fat Combine, the Leningrad Synthetic Detergent Combine imeni Karpov and the Voronezh Fat Combine operated well behind schedule. These organizations did not fulfill the soap production plans.

116,800 tons of facial soap was produced in 1979. And although the plan remained unfulfilled, this figure constitutes 9,000 more tons than last year's output level.

A good job was done by the facial soap production shops at the Kazan' Chemical Combine and the Kuybyshev Perfume Combine. On the other hand, a considerable lag in plan fulfillment was experienced at the Nevskiy Cosmetic Plant of the Leningrad Synthetic Detergent Combine. Facial soap production has not been introduced as scheduled at the Irkutsk Oil and Fat Combine, where the equipment for the new shop remained unused for a year. The modernization of the soap plant of the Novosibirsk Fat Combine has been delayed for some time.

As was already noted, the output plan for laundry and facial soap was not fulfilled last year. On a country-wide basis there was a short-fall of 125,000 tons by the ministries and departments which produce synthetic detergents, a fact which resulted in irregularities in the supply of these products to the trade network.

Soap production (on a 40 percent basis) is scheduled to increase 186,400 tons in 1980, which represents 30 percent more than in 1979, and synthetic detergents—11,500 tons or 9 percent.

In order to fulfill such a difficult plan it is necessary that the soap plant of the Novosibirsk Fat Combine go into operation beginning with the second quarter of this year.

The assembly and adjustment of high-capacity facial soap production lines at the Gor'kiy Oil and Fat Combine must be completed in the second quarter in order to place these lines in operation.

The improvement of equipment capacity for distillation of fatty acids of soap stock and industrial fats is planned. Their utilization coefficient was 0.84 in 1979.

23

Work on the subsequent introduction of new equipment and technology and the mechanization of production processes was performed last year at the production association's plants.

A fully mechanized line for continuous mechanical processing of facial soap has been placed in operation at the Leningrad Synthetic Detergent Plant. A fully mechanized line for continuous margarine production has been installed at the Khabarovsk Oil and Fat Combine. Production of the "Del'fin" facial soap has begun at the Moscow and Leningrad Synthetic Detergent Plants.

The technology for production of hydrogenated fat using multicomponent stationary catalyzers has been introduced at the Kazan' Chemical Combine and the Gor'kiy 0il and Fat Combine. The combines have begun production of super-esterified fats and margarine, using these catalyzers.

Extraction lines have been modernized and as a result their capacity has been increased 100 tons per day at the Georgiu-Dezh Oil-Extraction Plant and 50 tons per day at the Kropotkin Oil-Extraction Plant.

Eight toaster units were assembled during the year.

The experimental treatment of unshelled sunflower seeds was set up at the Rostov Oil and Fat Combine in the third quarter of last year with the participation of the workers of the Fat Technology Department of the Krasnodar Polytechnical Institute. Production-associated oil losses were reduced.

A line for freezing waxes and producing high-quality sunflower oil has been installed at the Shuyskiy Oil-Extraction Plant. A mechanized line for preparing synthetic detergents using the dry-mix method--at the Moscow Synthetic Detergent Plant, and a crusher for fine pulverizing of oil cake--at the Volgograd Mustard Plaster Plant.

Work to improve the storage qualities of agricultural raw materials has continued. DSP-32 driers have been installed at the Nal'chik Oil Plant and the Labinsk Oil Extraction Plant; the rotary dryer at the Georgiu-Dezh Oil-Extraction Plant has been modernized, using the technical documentation developed by the Leningrad Institute for Refrigeration Industry Technology; the rotary driers at the Nevinnomyssk Oil-Extraction Plant have been equipped with drying elements designed by the Krasnodar Scientific-Research Institute for the Food Industry, an innovation which makes it possible to increase the driers' output by 20-25 percent. The drying-purifying shop at the Balashov Oil Plant has been fully mechanized.

Nine preliminary distiller and 20 modernized YePM [not defined] presses have been assembled at the plants of the production association. Separators with an output of 100 tons of oil per day have been installed at the Armavir and Khabarovsk Oil and Fat Combines.

24

FOR OFFICIAL USE ONLY

Work to reduce manual !abor and to mechanize material-handling and warehouse operations was also performed.

An automatic machine for placing facial soap in corrugated boxes designed by the "Rospishchepromavtomatika" State Design Institute is in use at the Rostov Oil and Fat Combine. The facial soap wrapping line which uses the AKMA-711 wrapping machine based on designs of this same institute has been mechanized.

A machine for placing mayonnaise jars into cartons has been installed at the Krasnodar Oil and Fat Combine.

Material-handling operations have been mechanized at the raw materials store-house of the Barnaul Oil Plant and the mustard powder storehouse of the Volgograd Mustard Plaster Plant.

Seed delivery by self-unloading railcars has been introduced at five plants. A vehicle-tilting machine for unloading large-capacity trucks has been installed at the Severskiy Oil Plant, and the unloading of railcars carrying seeds and the loading of cars with oil cake have been mechanized.

In 1979 at the Nevskiy Cosmetic Plantethezengineer-technical personnel and innovators developed, manufactured and successfully tested all automatic device for group packaging facial soap of all types.

The introduction of new equipment and technology in 1979 yielded an approximate savings of about 4 million rubles.

However, not all the measures stipulated in the plan were implemented.

The Gor'kiy 0il and Fat Combine fell short in the production of surface-active food substances. Two completely mechanized lines for continuous processing of facial soap, two assembly lines for oil refining and a line for continuous margarine production were not placed in operation.

An oil refining line was not placed in operation at the Ussuriysk Oil and Fat Combine.

The construction of a device for producing hydrogen by an electrolytic method has been postponed until 1980 at the Leningrad Synthetic Detergent Combine. The start of production of solid confectionery fat and a cocoa fat substitute has been stricken from the plan.

The Omsk Synthetic Detergent Plant, the Kazan' Chemical Combine, the Gor'kiy Oil and Fat Combine and the Novosibirsk Fat Combine did not succeed in placing in operation container transport of finished output by rail and truck transport.

d

셯

Due to a lack of technical documentation seed processing capacity by the extraction method has not been increased at the Labinsk, Valuyki and Bogatoye Oil-Extraction Plants and at the Armavir Oil and Fat Combine.

In 1980 the industry is faced with the need to considerably accelerate the introduction of new equipment, advanced technology and the results of completed research.

The plan in 1980 calls for increasing extraction plant capacity 500 tons per day, at the Georgia-Dezh Oil-Extraction Plant--100, at the Krasnodar Oil and Fat Combine--150, at the Kropotkin Oil-Extraction Plant--50, at the Amavir Oil and Fat Combine--100, at the Valuyki Oil-Extraction Plant--50, and at the Labinsk Oil-Extraction Plant--50 tons per day.

The introduction of high-capacity and completely mechanized lines and equipment, which make it possible to reduce labor costs and increase labor productivity, will continue.

Four completely mechanized lines for continuous facial soap processing are planned for the Gor'kiy Oil and Fat Combine and the Novosibirsk Fat Combine. Five lines for continuous margarine production—for the Krasnodar, Gor'kiy, Khabarovsk and Novosibirsk Combines, two continuous mechanized oil hydration lines—for the Krasnodar Combine and the Labinsk Oil—Extraction Plant, and three continuous oil—refining lines—for the Gor'kiy Combine and the Valuyski Oil—Extraction Plant.

The mechanization of material-handling and warehouse-transport operations and other labor-intensive processes is continuing.

800,000 rubles were used for scientific research in 1979. The services of the All-Union Scientific-Research Institute for Fats, its affiliates, the "Rospishchepromavtomatika" State Design Institute and a number of other research and educational institutes performed this research.

The following research was performed in 1979:

--to develop a production process for soy meal and toasted meal;
--to develop engineering designs to increase oil-extraction plant output in plants equipped with ND-1250 lines, specifically to increase output of sunflower seed-derived oil to 500 tons per day and that of soy beanderived oil to 300 tons per day;

--to develop and apply a technology for producing solid fat--a cocoa fat substitute;

--to develop a technology for producting surface-active food substances and to find applications for them in various food products;

--to develop new varieties of caster-oil plants, Chinese mustard plants and high oil-yield varieties of sunflower plants;

--to develop a drying apparatus for continuous single-pass drying of sunflower seeds and to modernize existing rotary driers.

26

FOR OFFICIAL USE ONLY

Some plants underestimate the importance of incorporating the results of completed research of the Krasnodar affiliate of the "Rospishchepromavtomatika" State Design Institute.

For example, for a number of years, the machining plant of the Krasnodar Oil and Fat Combine has not manufactured the equipment which increases mechanization of manual labor, automatic equipment for packaging limited types of facial soap in cartons and a labelling machine.

The results of some research is incorporated behind schedule because the machine-building plants delay production of the necessary equipment. Among these items are an automatic machine for palletizing soap cartons, an automatic machine for containerizing synthetic detergent boxes, a facial soap stamp-punch with a 350 soap bars per minute handling capacity.

In 1979 the number of inventors and innovators at Roszhirmasloprom plants reached 2,400. More than 2,000 innovative suggestions and seven inventions yielding a savings of 2.65 million rubles were incorporated.

Roszhirmasloprom plants participated in the All-Union Review of the Utilization of Inventions and Innovative Suggestions. By decision of the awards committee of the RSFSR Ministry of the Food Industry and the presidium of the union's Central Committee the Rostov Production Association for the Oil and Fat Industry and the Kazan' Chemical Combine imeni Vakhitov were declared winners.

The ministry's plants work to improve product quality. During 1979 a comprehensive quality control system was installed at 11 plants. A total of 39 plants are using this system as of 1 January of this year. The development of a comprehensive quality control system has now begun at the production associations.

Seven new product types were introduced last year:

the synthetic detergent "Robot" with reduced foam formation for cleaning very dirty items—at the Moscow synthetic Detergent Combine and the Kazan' Chemical Combine imeni Vakhitov;

the synthetic detergent "Biolot" with biological additives—at the Moscow Synthetic Detergent Combine;

the synthetic cleanser "Oka"--at the Moscow, Kazan' and Leningrad Combines;

surface-active food substances--at the Gor'kiy Oil and Fat Combine; the facial soap "Del'fin"--at six plants;

margarine for pastry icing--at the Krasnodar and Irkutsk 0il and Fat Combines;

the facial soap "Lazur"--at the Nevskiy Cosmetic Plant.

The facial soap "Priz" with Olympic symbols is now in production at the Rostov, Euybyshev and Kazan' Combines, and the soap "Marochnoye"—at the

27

Kazan' Chemical Combine. Output of these soaps exceeded the plan by two-fold and equaled 80,000 cartons.

In 1979 19.8 million rubles worth of first-grade products were produced; this represents 3 million rubles more than the 1978 level.

A seminar for the exchange of experience in the design and introduction of comprehensive quality control systems was conducted last year in Novosibirsk. In 1980 a number of measures should be undertaken to improve product quality and the health conditions at plants. Comprehensive quality control systems are also to be installed at 12 plants.

Socialist competition to achieve ahead-of-schedule plan fulfillment was launched in 1979 at the association's plants. At the Kazan' Chemical Combine 75 work teams fulfilled the plan for four years of the five-year plan ahead of schedule, and 10 teams--by 7 October.

The initiative of the workers of Rostob Oblast' "Work without Laggers" was widely promoted. It has been picked up by the Rostob Production association for the Oil and Fat Industry, the plants of the North-Caucasian Production Association, the Ussuriysk and Khabarovsk Oil and Fat Combines, the Kazan' Chemical Combine, the Uryupinsk Oil-Extraction Plant and the Barnaul Oil Plant. Plans for implementing this initiative were developed for 1979-1980.

Following the example of the workers of the Yampol'skiy Rayon of Vinnitsa Oblast' last year 28 plants concluded contracts to promote cooperation with agricultural workers—a total of about 300 contracts. The mutual commitments are designed to increase the output of vegetable oil produced from each hectare of sunflower crops.

The commitments made by the plants to insure around-the-clock acceptance, drying and distribution of seeds received have been fulfilled.

The seed harvest fell short because of unfavorable weather conditions; therefore, the commitment to provide a certain yield of vegetable oil from each hectare has not been fulfilled. An exception is the Labinsk Oil-Extraction Plant, which in cooperation with the rayon's kolkhozes produced 1200 kg of oil from each hectare compared with a commitment of 900 kg.

The Roszhirmasloprom plants last year participated in the all-union and republic socialist competition. As a result the work collective of the Kazan' Chemical Combine imeni Vakhitov has been presented with the 1979 Red Banner of the CPSU Central Committee, the USSR Council of Mininters, the All-Union Central Trade Union Council and the Komsomol Central Committee, and the collective of the Armavir Oil and Fat Combine with the Red Banner of the RSFSR Council of Ministers and the All-Union Central Trade Union Council.

28

FOR OFFICIAL USE ONLY

The Red Banners of the USSR Ministry of the Food Industry and the trade union's Central Committee for the food industry were awarded to the collectives of the Kazan' and Armavir Combines in the first, second and third quarters; the Red Banners of the RSFSR Ministry of the Food Industry and the trade union's Central Committee for the food industry—to the collectives of the Kropotkin Oil-Extraction Plant in the first quarter, the Bobrov and Baladhov Oil Plants in the third quarter; second prizes to the collectives of the Nevinnomyssk and Atkarsk Oil-Extraction Plants in the first quarter, the Bobrov and Starooskol'skiy Oil Plants in the second quarter, he Labinsk Oil-Extraction Plant in the second and third quarters; third prizes to the collectives of the Khvalynsk and Oblovskiy Oil Plants in the first quarter.

For achieving high output indicators 11 persons were awarded the badge "For Excellence in RSFSR Socialist Competition," 9 persons—the Honorary Certification of the RSFSR Ministry of the Food Industry and the trade union's Central Committee for the food industry, 715 persons—the badge "Winner of Socialist Competition for 1979."

The 110th anniversary of the birth of V. I. Lenin evoked a high political and labor response. In the work collectives socialist competition for the worth commemoration of the Lenin jubilee has been launched as well as the successful completion of individual five-year plans.

The results of the work of the industry in the past year and the tasks for 1980 were comprehensively analyzed at the plant managers' council in January of this year, where shortcomings in work were criticized and also measures to insure fulfillment of plans, supplementary plans and socialist commitments were developed and approved.

The blue- and white-collar and engineer-technical personnel of Roszhirmasloprom, enthused about the decisions of the November (1979) Plenum of the CPSU Central Committee, have made the following socialist commitments for 1980:

- --to fulfil the year's gross output plan on 30 December and produce 5 million rubles worth of surplus output;
- --to market supplementary products at the retail amount of 7.2 million rubles;
- --to produce 1,000 tons of vegetable oil, 1,000 tons of margarine and 200 tons of feed phosphatides above the plan figures;
- --for the purpose of increasing vegetable oil production to concentrate the processing of sunflower seeds beginning with 1 January 1980 mainly at oil-extraction plants and to produce as a result 350 tons of additional vegetable oil;
- --to save 700 tons of vegetable oil by producing oxypolymerized drying oil and using soapstock fatty acids derived from flax oils in the preparation of soap and as a result to reduce the comsumption of industrial hydrogeneted fat 400 tons;

- --to increase labor productivity by 0.1 percent based on the introduction of the Shchekino Plant's method for improving labor organization, material incentives and planning at the Bogatoye, Orenburg and Uryupinsk Oil-Extraction Plants, the Novosibirsk Fat Combine and for reducing unproductive losses of work time at association plants;
- --for the purpose of accelerating scientific-technical progress to implement comprehensive mechanization of 18 shops and areas; to install 12 pieces of new equipment and 5 mechanized conveyor and automated lines and to obtain a savings of 4.1 million rubles as a result of placing the new equipment in operation;
- --to obtain a savings of 2.7 million rubles from incorporating inventions and innovators' suggestions;
- --to save 10,800 tons of conventional fuel, 431.24 TDzh (103,000 Giga calories) of heat energy and 34.9 Tdzh (9,700 kilowatt hours) of electric energy as a result of implementing measures developed and improving the utilization of reserves;
 - -- to place in production three new product types;
- --to place in operation 2,846 square meters of living quarters at the Uryupinsk Oil-Extraction Plant;
- --to conduct a seminar at the Kuybyshev Perfume Combine for the purpose of disseminating the progressive experience of individual soap manufacturing plants.

COPYRIGHT: "Pishchevaya Promyshlennost'," "Maslo-Zhirovaya Promyshlennost'"

9596

CSO: 1824

LIVESTOCK FEED PROCUREMENT

ESTABLISHMENT OF RELIABLE FEED BASE FOR LIVESTOCK

Moscow KORMOPROIZVODSTVO in Russian No 6, Jun 80 pp 1-3

[Article by A. I. Ol'yashev, chief of the Main Administration of Feeds, Meadows and Pastures of the USSR Ministry of Agriculture: "A Stable Feed Base for Animal Husbandry"]

[Text] In recent years the development of animal husbandry has confidently entered on the path of deepening specialization and concentration and changing the production of products over to an industrial base. Specialization and concentration open up great possibilities for a more rapid increase in the volumes of production of products, a reduction of production costs and an increase in labor productivity on the basis of mechanization and automation of working processes and the introduction of progressive technology for producing animal husbandry products.

In implementing the party's historic decision regarding questions of further development of agriculture, animal husbandry workers are taking all measures to increase the production of meat, milk, eggs, wool and other products. Because of increased productivity and more livestock and poultry, a considerable improvement in the conditions for maintaining and feeding agricultural animals, a considerable improvement in the conditions for maintaining and feeding agricultural animals, improvement of breeding work, mechanization of labor-intensive processes and the introduction of progressive technologies, the production of animal husbandry products has increased by significant amounts. In 1979 as compared to 1965 the production of all kinds of meat in slaughtered weight increased by 54 percent, milk--by 28 percent, eggs-more than 2-fold and wool--by 32 percent.

We have developed and are implementing a complex of measures for creating a stable feed base on the basis of further increase in the productivity of feed crops and the productivity of natural feed land, the extensive introduction of progressive technologies for preparing feeds, and increased production of mixed feeds at state and interfarm enterprises and also various feed supplements from microbiological and chemical synthesis.

31

FOR OFFICIAL USE ONLY

Specialization and concentration of feed production are developing more and more extensively. Specialized complexes, detachments and brigades for feed production which have the necessary technical equipment and material means are operating successfully on kolkhozes and sovkhozes of all the union republics. On the basis of cooperation, specialized farms are being created for producing coarse and juicy feeds for animal husbandry complexes and interfarm enterprises are being constructed for producing mixed feeds and feed supplements. These new organizational farms give feed production a branch nature and create necessary conditions for establishing a strong feed industry in agriculture.

Not only the quantitative, but also the qualitative indicators of feed production are improving each year, and more progressive technologies for preparing feeds are being introduced extensively. The production of haylage and artificially dehydrated feeds (meals, granules, briquettes) is increasing on the kolkhozes and sovkhozes. There has been a considerable increase in the preparation of pressed hay and hay that is prepared by the active ventilation method. The preparation of silage using chemical preservatives and synthetic nitrogen substances is becoming widespread. More mixed feeds and protein-vitamin supplements are being produced at state enterprises. The production of mixed feeds has been organized on a wide scale at interfarm, kolkhoz and sovkhoz enterprises.

But the level of development of the feed base that has been reached still does not satisfy the growing needs of animal husbandry and thus it retards the growth rates of the production of products of this branch. In order to provide for the production of feeds in the necessary quantities, the CPSU Central Committee and the USSR Council of Ministers recently adopted a number of important decrees that envision strengthening the material and technical base for feed production, intensifying this branch on the basis of efficient utilization of pasture land and natural feed lands, reducing losses and improving the quality of feeds through extensive introduction of production technologies, preparing and storing feeds and utilizing them more efficiently in animal husbandry. By implementing these decisions many farms are achieving significant successes in strengthening the feed base. The practice of farms in Vinnitskaya Oblast is worthy of extensive dissemination. On the basis of comprehensive plans for the development of feed production, they are purposively creating a specialized branch for producing feeds and for providing for regular fulfillment of the program for increasing production of animal husbandry products and their sale to the state. In 1980 the farms of the oblast should produce 35 quintals of feed units per conventional head of livestock as against 31.2 quintals in 1979.

Comprehensive programs for the development of feed production have also been drawn up in Gomel'skaya, Kiev, L'vovskaya, Leningrad and other oblasts.

FOR OFFICIAL USE ONLY

At the same time, as was noted in a recently adopted decree of the CPSU Central Committee and USSR Council of Ministers, "On Additional Measures for Increasing the Production of Coarse and Juicy Fodders in 1980 and Improving their Quality," the measures earmarked by the July (1978) Plenum of the CPSU Central Committee are not being implemented energetically enough. In a number of republics, krays and oblasts, party, soviet and agricultural agencies as well as managers and specialists of farms are taking less responsibility for providing animal husbandry with high-quality feeds from their own production. The CPSU Central Committee and the USSR Council of Ministers again drew the attention of party, soviet and agricultural agencies to the fact that the shortage of coarse and juicy feeds is one of the main reasons for the poor productivity of animal husbandry and will lead to a considerable overexpenditure of grain.

This year the kolkhozes and sovkhozes and other state agricultural enterprises should produce 20 percent more coarse, juicy and green feeds (in feed units) than last year. For the 1980/81 wintering the kolkhozes and sovkhozes will have to prepare 36 percent more hay, haylage, feed root crops and grass meal than they actually prepared in 1979 for public animal husbandry and also for livestock that are the private property of kolkhoz and sovkhoz workers. As we can see, the tasks are great and responsible. Their successful implementation will require fuller utilization of all capabilities related to raising feed crops and increasing the productivity of natural feed lands as well as making use of all reserves for accumulating feeds.

The experience of many farms shows that each kolkhoz and sovkhoz is capable of creating its own stable feed base. The main thing is to be able to put this matter on the correct organizational basis. For example, on the Put'k kommunizmu on Stepnovskiy Rayon in Stavropol'skiy Kray, where the chairman is a talented organizer, a deputy of the RSFSR Supreme Soviet, N. D. Tereshchenko, feed production is constantly increasing. While under the Eighth Five-Year Plan they prepared an annual average of 5,900 tons of feed units here, under the Ninth--10,500, and during four years of the Tenth Five-Year Plan-more than 28,000 tons of feed units. This made it possible under the Tenth Five-Year Plan for the farm to increase the sale of grain to the state 2.3-fold, meat--1.3-fold, milk--1.8-fold and wool--1.5-fold as compared to the Eighth Five-Year Plan.

At the present time the kolkhozes and sovkhozes are taking measures to increase the production of feeds and are seeking out additional possibilities of increasing the productivity of feed crops. In the country as a whole 1.5 million hectares more will be planted in feed crops on arable land than was previously intended. As compared to last year the areas planted in perennial grasses will increase by 1.4 million hectares, including legumes—by almost 1 million hectares. Legumes will occupy 56 percent of the areas planted in perennial grasses. The area planted in alfalfa on non-irrigated land will increase by 500,000 hectares. Assignments for significantly expanding the areas in this crop are being fulfilled successfully in the Azerbaijan SSR, the Moldavian SSR and the Ukranian SSR. At the same time there is a sharp

FOR OFFICIAL USE ONLY

reduction in the areas planted in annual grasses and the areas planted in feed root crops are increasing.

The areas planted in feed crops on irrigated land is to increase to 400,000 hectares this year. Perennial grasses will occupy more than 66 percent of this area. There will be a considerable expansion of the irrigated areas planted in alfalfa and feed root crops.

Questions of increasing the productivity of each hectare of land, improving the structure of the areas planted in feed crops, and directly selecting them should be constantly at the center of the attention of agricultural agencies and farm specialists. It is necessary to expand the areas planted in those crops which, under the given specific conditions, provide for the greatest yield of nutritive substances per hectare. A main area for solving this problem should be improving seed growing for feed crops. But many managers and specialists of farms, in the hope of obtaining seeds from specialized farms, have ceased to engage in seed growing of grasses on their own farms. This is a great mistake since specialized farms are still not able to provide seeds for all farms.

The existing capabilities of irrigation farming for increasing the production of high-quality feeds are far from being fully utilized. In recent years the areas planted in alfalfa on these lands have practically not expanded and in the overall structure of the planted areas they even decreased in 1979 to 69 percent as compared to 72 percent in 1976. Not enough alfalfa is being raised on irrigated land in the RFSSR, Armenia, Kirgizia and Georgia. At the same time annual grasses unjustifiably occupy considerable areas of irrigated land year in and year out even though their productivity is little more than half that of perennial grasses. In general the productivity of feed crops on irrigated land has almost not increased. Moreover, in the Turkmen SSR, the Tadzhik SSR, the Kirgiz SSR, the Georgian SSR, the Kazakh SSR, the Armenian SSR and the RFSSR, for a number of crops, it has even dropped before the level attained under the Ninth Five-Year Plan.

Irrigated land should be used to cultivate those crops which during the entire course of the growing period provide for the greatest increase in green mass with high nutritive qualities. Calculations show that by observing conditions for irrigation, expanding areas planted in alfalfa, sorghum and sudan grass and more extensively introducing intermediate plantings of feed crops and also correctly utilizing mineral fertilizers that are allotted for irrigated land, even this year it will be possible to increase the yield of feeds from irrigated lands 1.5-2-fold. This task is realistic and practical measures must be taken to carry it out.

Special attention should be paid to questions of mowing hay lands more than once, especially when it is irrigated. Under these conditions, early mowing times combined with progressive technologies for procuring feeds—preparing haylage, briquettes, granules and grass meal—increase the output of nutritive substance per unit of area of more than 1.5-fold. Leading farms of the

FOR OFFICIAL USE ONLY

country obtain up to 180 quintals of alfalfa hay per hectare from irrigated land with this kind of utilization of the grass stands. Even in Povolzh'ye with 3-4 mowings it provides for 50-60 quintals of hay per hectare. But in many oblasts of the RFSSR the farms annually conduct one or at best two mowings of alfalfa.

Intermediate plantings of feed crops are a large reserve for increasing feed production in rayons that have sufficient moisture and under conditions of irrigation. In 1980 these plantings should occupy no less than 5.5. million hectares. As a result of intermediate plantings feed production can increase by 5.5-6 million tons of feed units. Many farms of Khersonskaya, Krymskaya, Dnepropetrovskaya and other oblasts have other intermediate plantings on 20 percent and more irrigated land and they achieve large yields of feeds. For example, the Avangard Kolkhoz in Chernigovskiy Rayon in Chernigovskaya Oblast annually uses more than 40 percent of the land for intermediate plantings and obtains an additional 30,000-32,000 quintals of feed units, which amounts to about 25 percent of the overall production of feeds on cultivated land. In the Belorussian SSR, because of intermediate plantings, they annually obtain up to 1 million tons of additional feed units.

Increasing the production of forage grain plays an important role in creating a stable feed base for animal husbandry. This must be achieved both through increasing productivity and partially through expanding the areas planted in pulp crops and also the most productive of the grain crops—corn and barley—especially in places where they produce the largest yields.

The problem of increasing the production of vegetable protein remains critical as usual. In recent years there has been a considerable shortage of nutritive protein in the feed balance for animal husbandry. The poor supply of nitritive protein for animal husbandry not only leads to a large shortage of output, but also brings about a significant overexpenditure of feeds, especially grain forage. In solving this problem major attention should be devoted to increasing the production of pulp crops.

In the European part and the east of the country (the zones of the Urals, Western Siberia and Kazakhstan), of the pulp crops peas should occupy an important place in the planted areas; in the western regions of the RFSSR, in the Belorussian SSR, in the Baltic areas and the Polesskaya zone of the Ukranian SSR--lupine, and in the Far East, on irrigated land in Central Asia, the northern Caucasus, the south of the Ukraine and in Moldavia--soybeans. This is even more important since the shortage of seeds of pulp crops and primarily of soybeans, peas and spring vetch make it impossible to expand the areas planted in pulp and grass mixtures. For this reason each year more than half of the area planted in annual grasses is occupied by pure grain spike crops.

The areas planted in such feed crops as winter rape, oil-bearing radish, wild cabbage and other cruciferae should be expanded considerably. And to do this it is necessary to engage seriously in seed growing.

Since not enough mineral fertilizers are being allotted for feed production yet, it is necessary to use as much organic fertilizer as possible for feed crops. In places where they have not yet begun to plant and there is still time, it is necessary to finish bringing all seeds of feed crops up to high planting conditions, to provide for their planting at the best agrotechnical time, prompt care of the planted areas, top dressing with mineral fertilizers, and fighting against weeds, diseases and pests, and to organize prompt and high-quality irrigation.

Natural feed lands are an important source of producing feeds. But they are still not being utilized efficiently enough. Many farms do not devote the proper attention to root and surface improvement of natural feed lands, to the creation of irrigated hay fields and pastures, or to the flooding of pastures. In a number of union republics the established assignments for these kinds of work are not fulfilled, which threatens the earmarked plans. Each farm, rayon and oblast must achieve overfulfillment of the assignments established for 1980 for improving natural feed lands so as to provide for unconditional fulfillment of the assignments of the Tenth Five-Year Plan regarding these jobs.

Natural feed lands should become one of the main areas in the creation of a stable feed base for animal husbandry. Increasing feed production through intensive utilization of hay fields and pastures will make it possible to release some of the arable land for raising other feed crops. To this end, it is necessary for each farm to develop and implement specific measures for organizing care of the hayfields and pastures, applying the necessary quantity of mineral and organic fertilizers, improving the utilization of hayfields and pastures and sharply increasing their productivity.

Special attention should be devoted to improving the quality of the feeds that are procured and improving their storage. Prompt progressive technology for procurement and storage of feeds makes it possible to provide for preserving up to 80-90 percent of the nutritive substances in feeds, while with ordinary technologies for the procurement of feeds, the losses of nutritive substances reached 30 percent and more. It should be noted that each year the kolkhozes and sovkhozes prepare a large quantity of poorquality feeds, which indicates a lack of the proper control over the observance of technologies for their production. Thus last year in the country 48 percent of the hay that was inspected was of class III or substandard, silage--46 percent, haylage--57 percent and substandard grass meals--19 percent.

This year progressive technologies will be applied in feed production on a larger scale. Thus the volumes of procurements of hay by the method of active ventilation will increase 2.7-fold as compared to last year, pressed hay--2.2-fold, and the production of briquette and granulated feeds will increase 3.2-fold. More grass meal and silage will be prepared with chemical preservatives.

FOR OFFICIAL USE ONLY

One cannot tolerate a situation where workers deliberately begin the procurements of feeds late, hoping to obtain more mass. Many farms begin haying during the phase of blossoming of the grasses and take a month or more to conduct it instead of 5-6 days. One cannot forget that to delay the beginning of the first mowing leads to a decrease in the number of subsequent mowings, a reduction in the yield of feed units and digestible protein of 40-50 percent as compared to the harvesting of pulp crops during the phase of budding and grass crops—during the phase of heading. It is very important to take prompt measures to eliminate these losses which are allowed with early harvest times for corn for silage and feed root crops.

Special attention should be devoted to the fulfillment of the earmarked volumes of construction of feed storage facilities—for silage and haylage, hay, root crops and grain forage. To create reliable supplies of high-quality feeds for the forthcoming wintering is one of the most important tasks and there is no doubt that feed production workers will exert all efforts, knowledge and ability to cope honorably with this task.

COPYRIGHT: Izdatel'stvo "Kolos", "Kormoprozvodstvo", 1980

11772

CSO: 1824

END